

## CLAIMS:

1. An electrophoretic display panel (1), comprising:
  - an electrophoretic medium (5) comprising charged particles (6);
  - a plurality of picture elements (2);
  - 5 - electrodes (3,4) associated with each picture element (2) for receiving a potential difference; and
  - drive means (100),

the drive means (100) being arranged for controlling the potential difference of each picture element (2) to be a grey scale potential difference for enabling the particles (6) to occupy the

10 position corresponding to the image information,

characterized in the drive means are further arranged for application of grey scale potential differences during an update period to only a sub-assembly of the picture elements of the display, without addressing the remainder of the picture elements of the display during said update period.
- 15 2. An electrophoretic display panel as claimed in claim 1, characterized in that the drive means are further arranged for application of grey scale potential differences at only a portion of the display, i.e. a specific area of the display.
- 20 3. An electrophoretic display panel as claimed in claim 1, characterized in that the drive means are arranged for application of grey scale potential differences in an interlaced manner.
4. An electrophoretic display panel as claimed in claim 1, characterized in that
- 25 the drive means are arranged for application of a common grey scale potential difference to all of the picture elements to drive each picture element to a position corresponding to or close to a position corresponding to the grey scale data, and for separate application of grey scale potential differences at only a sub-assembly of the picture elements of the display, without addressing the remainder of the picture elements of the display.
- 30 5. An electrophoretic display panel as claimed in claim 4, wherein the drive means are arranged for separate application of grey scale potential differences prior to the application of the common grey scale potential difference

6. An electrophoretic display panel as claimed in claim 4, wherein the drive means are arranged for separate application of grey scale potential differences subsequent to the application of the common grey scale potential difference.
- 5 7. An electrophoretic display panel as claimed in claim 1, wherein the drive means are arranged for application of preset voltage differences.
8. An electrophoretic display panel as claimed in claim 1, wherein the drive means are arranged for application of a reset potential difference.
- 10 9. An electrophoretic display panel as claimed in claim 8, wherein the drive means are arranged for application of an overreset potential difference.
10. A method for driving an electrophoretic display device comprising:  
15 - an electrophoretic medium (5) comprising charged particles (6);  
- a plurality of picture elements (2), in which method grey scale data pulses are applied to elements of the display device during an update period, characterized in that the grey scale data pulses are applied to a sub-assembly of the picture elements, without updating the remainder of the picture elements.
- 20 11. A method as claimed in claim 10, characterized in that the grey scale data pulses are applied portion-for-portion of the display panel.
12. A method as claimed in claim 10, characterized in that the grey scale data  
25 pulses are applied in an interlaced manner.
13. Drive means (100) for driving an electrophoretic display panel (1), said display panel (1) comprising:  
30 - an electrophoretic medium (5) comprising charged particles (6);  
- a plurality of picture elements (2); and  
- electrodes (3,4) associated with each picture element (2) for receiving a potential difference;  
- said drive means (100) being arranged for controlling the potential difference of each

picture element (2) to be a grey scale potential difference for enabling the particles (6) to occupy the position corresponding to the image information, said drive means (100) being further arranged for application of grey scale potential differences during an update period to only a sub-assembly of the picture elements of the display, without addressing the remainder of the picture elements of the display during said update period.